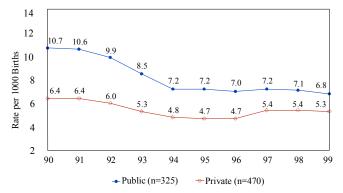
Issue Brief #3 - December, 2002

Rhode Island's Infant Mortality Rate Drops Significantly in 1990s

"Infant Mortality" or infant death rate is defined as the number of deaths in the first year of life for every thousand births. This rate is widely used as an indicator of the quality and accessibility of a population's health system. This is because many causes of death in the first year of life can be prevented or avoided - prevented by access to regular doctor visits or avoided if conditions found at these visits are appropriately treated.

In 1990, Rhode Island infant mortality rate was one of the lowest in the country at 8.2 deaths per 1,000 live births. Despite this achievement, there remained a significant disparity in the infant mortality rate between higher income Rhode Islanders with private insurance and lower income Rhode Islanders on public insurance. Rhode Island infants born to low income mothers on public health insurance in 1990 died at a rate of 10.7 per thousand, while infants born to higher income mothers with employer-sponsored health coverage in that same year died at a rate of 6.4 per thousand. (See Figure 1)

Figure 1: Infant Mortality in Rhode Island by Insurance Status, 1990-1999



Data Source: Linked Birth Death File 1990-99, Department of Health Deaths per 1000 births to Infants 0-364 days - 3 year moving average In the 1990s, overall, infant mortality in Rhode Island declined 20 percent – from 8.2 deaths per 1,000 births to 6.5 deaths per 1,000 births by 1999. Even more striking, however, was the significant decline that occurred for low-income infants with public insurance. The infant mortality rate dropped a full 36 percent for infants with publicly funded coverage, from 10.7 per 1,000 births to 6.8 per 1,000 births

Although the infant mortality rate by 1999 was still higher for infants with publicly funded insurance than for infants with employer-sponsored insurance, the gap closed significantly. The gap was cut by more than half in the 1990s, from a 4.3 point gap in 1990 to 1.5 points in 1999.

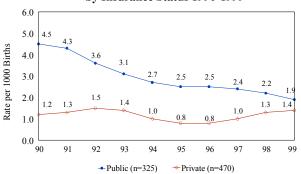
Postneonatal Deaths Dropped Steeply for Low Income Publicly Insured Infants

The rate of infant deaths in the first month of life can be impacted by access to neonatal intensive care. Specialty care for high-risk births are available to all infants born in Rhode Island. However, infant deaths from the second month to the first birthday, "postneonatal infant mortality," can more often be prevented by access to routine pediatric care and treatment.



The most significant decline in infant mortality during the 1990s was in postneonatal mortality for low-income infants with public insurance. As Figure 2 shows, the postneonatal death rate for publicly insured infants dropped from 4.5 per 1,000 births to 1.9 per 1,000 births, a 58 percent reduction. The postneonatal death rate rose 17 percent for privately insured infants during the same decade. The increase in deaths for privately insured infants is due to a trend toward multiple births among women with private insurance.

Figure 2: Postneonatal Mortality in Rhode Island by Insurance Status 1990-1999



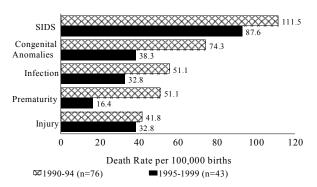
Data Source: Linked Birth Death File 1990-99, Department of Health

Deaths per 1000 births to Infants 28-364 days - 3 year moving average $\,$

Declines Seen For All Causes of Death

Declines in postneonatal infant deaths for publicly insured infants occurred for all causes of death during this decade. (See Figure 3.) Between the periods 1990-1994 and 1995-1999, deaths due to preventable causes such as SIDS, infection and injury all decreased. Deaths due to congenital anomalies and prematurity also declined. Mortality rates dropped as greater numbers of publicly insured children under age one gained better access to infant pediatric care.

Figure 3: Changes in Rates of Deaths per 100,000 Publicly Insured Rhode Island Infants, 1990-1999



Data Source: Linked Birth Death File 1990-1999, Department of Health

Public Insurance Coverage Improves Access to Care and Outcomes

During the 1990s, there were expansions in publicly funded insurance, first with RIte Start in the early 1990s and then with RIte Care in 1994, that improved the delivery of health care for low income and uninsured Rhode Island families by enrollment in health plans. Health insurance coverage has been shown to improve access to care, quality of care, and health status and outcomes. Evaluations of the RIte Care program show just that - that enrollment in RIte Care health plans have improved access to prenatal and pediatric care for enrollees.

Acknowledgements: This project was a joint effort between the Department of Human Services and the Department of Health. This report is based on an analysis of 144,352 births and 905 infant deaths to Rhode Island residents between 1990 and 1999. The Vital Statistics data was provided by the RI Department of Health. The data was analyzed by the Medicaid Research and Evaluation Project in conjunction with Brown University.

Note: This Issue Brief is a summary of an evaluation report. Copies of the full report may be request by contacting Holly Tartaglia at (401) 462-6367 or by email Htartagl@gw.dhs.state.ri.us

^{*}Postneonatal deaths (28-364 days)